# $Ru_2Ge_3$: CRYSTAL GROWTH AND SOME PROPERTIES

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Abstract

Large samples of $Ru_2Ge_3$ were grown from Ge-rich off-stoichiometric melts at a temperature close to 1460°C by a vertical gradient freeze method in graphite and glassy carbon crucibles. The preferential direction of growth was determined as [040] (high temperature tetragonal modification) and thermal expansion coefficients of both low and high temperature structures were measured. Some electrical and thermal transport properties in the 25-1000°C temperature range are also described for this high temperature semiconductor.